

A COMPARATIVE ANALYSIS OF SELECTED SECTORS OF THE KUWAITI ECONOMY

AHMAD KHATIB & STEVEN TELFORD

Assistant Professor, Department of Management, School of Business, Australian College of Kuwait, Kuwait

Assistant Professor, Department of Management, School of Business, Australian College of Kuwait, Kuwait

ABSTRACT

It is essential for investors when they want to make their decisions to have reliable information on the sector they are interested in. This paper compares four sectorial groups of the Kuwaiti economy (Real Estate, Banking, Financial Services and Industrial Products) by using three measures of performance (Net Profit Margin, Return on Equity and Return on Assets). The performance of these sectors are reviewed and statistically compared to each other. The Banking Sector appears to be by far the safest sector, whereas 'Non-banking finance' appears to exhibit what many investors would surely consider an irrational risk to return trade-off.

KEYWORDS: *Kuwait Economy, Stock Exchange, Investment Risk, Performance Analysis, Profitability, Real Estate, Banking, Financial Services & Industrial Products*

Received: Dec 31, 2017; **Accepted:** Jan 21, 2018; **Published:** Feb 03, 2018; **Paper Id.:** IJECRFEB20181

INTRODUCTION

The primary purpose of this paper is to evaluate the relative performance of four sectors of the Kuwait economy: Real Estate, Banking, Financial Service and Industrial. As well as generating a picture to better inform on the comparative performance of the sectors. We evaluate if the standard risk and return trade-offs are materialising themselves as orthodox economics suggests they should. The three variables of comparison are five-year averages for the following measures: Net Profit Margin, Return on Assets and Return on Equality. The data were collected from published financial reports of the respective Kuwaiti firms for the period of 2011-2015 and taken directly from the Kuwait Stock Exchange website (www.boursakuwait.com). The main statistical tools which are deployed are standard pair wise t-tests and –in a supportive capacity – analysis of variance, checked by a Monte Carlo iteration simulation. The results indicate that Banking is by far the most attractive sector to invest in. In regards to second and third preference, there appears little to pick between real estate and the industrial sector, by large they appear equally attractive. Non-banking financial services; as a sector, is the last preference as it is shown to represent what appears to be an irrational risk to return trade-off.

Statement of the Problem

Most of the research on sectors performance in the Kuwaiti economy focuses on the oil sector and the banking sector since these two sectors are the largest sectors in the Kuwaiti economy. There is not enough research to compare the performance of different sectors in the Kuwaiti economy due to the shortage of relevant data or published financial information. The importance of this study stems from the fact that it tries to compare the different sectors and point out to the most attractive sector or sectors for investments in the Kuwaiti Stock Market

LITERATURE REVIEW

On top of the oil sector which makes up about 95% of Kuwait's economy, other sectors have been growing and attracting investors such as banking, financial services and real estate. The Banking Sector is considered to be the second most important next to oil (Al-Shamali et al., 2012).

In terms of value, the Kuwaiti Stock Market is dominated by financial companies, especially banks. According to Meed Business Review (2016) two banks, National Bank of Kuwait and Kuwait Finance House, account for almost a third of the total market capitalization of companies traded there.

Compared to other exchanges, relatively few studies have been done on the Kuwaiti Stock Market and the performance of companies listed there. Al-Abdulahadi et al., (2013) found that the Kuwaiti Stock Market is considered to be inefficient due to the significant independence existing between the changes in prices and returns. Indeed, that appears to be the case for many emerging markets which are categorized as small size, thin trading and less regulated markets.

As far as financial performance of firms in general and how it is measured, Nyor et al. (2016) described financial performance of a firm as the level of performance of that firm over a particular period of time expressed in terms of a profit or loss the business makes measured in monetary terms. These results are expressed in terms of return on investments, return on assets or value added. Chadha (2014) analyzed the performance of firms listed on Kuwait Stock Exchange by using Altman's Z-score model and Zmijewski score model to predict the performance and the rate of financial distress for all companies listed on the Kuwaiti Stock Market. The results of Altman's Z-score as summarized by Chadha (2014) showed that approximately 39% of firms were financially secure. Approximately 26% of firms for the period 2009-2014 were distressed. On average, approximately 16% of firms for the period 2009-2014 were neither secure nor distressed, and the balance (19%) had no available data. While the results of Zmijewski score model showed approximately 11% of firms for the period 2009-2014 were financially secure, approximately 58% of firms for the period 2009-2014 were bankrupt, approximately 12% of firms for the period 2009-2014 were neither secure nor safe, and the balance approximately 19% of firms had no available data.

As far as the specific sectors in the Kuwaiti Stock Market, Chadha (2014) concluded in his study that banks and industrials are relatively attractive for investment as they are considered to be minimal risk sectors. On the other hand, real estate and financial services are considered to be among the worst performers and most prone to distress sectors.

Benjamin et al (2001) emphasised the fact that the real estate sector has usually low returns comparing to other sectors however; fund managers like to include real estate investments in their funds since it provides protection against unexpected inflation. Benjamin et al. (2001) also mentioned some issues regarding the nature of real estate returns related to the method of measuring real estate returns and the returns of different types of properties.

As far as the banking sector, Al-Shamali et al. (2012) states that the banking sector has been doing really well in the last two decades. One reason as he mentioned helped the bank is the support the banking sector has been given from the government. He reiterates the fact that only few banks are operating in the country.

Analysing the risk and return on investments; MacGregor (1999) found that while suitable returns must be weighed against risk, the goodness of an investment is mainly related to the perception of return, and consideration of risk is not a primary factor. One possible explanation of that is returns are more easily estimated and can be represented on a

numerical scale. Risk however is not easily measurable and not readily represented in one-dimensional terms. Ane and Kharoubi (2003) point out to the difficulty of estimating the risk on investments but believe comprehending the connection among the different outcomes would help improve protection against financial risk of investments.

Analysis

Outliers have been stripped out by the standard upper and lower fence rule ($Q1-1.5*IQR$, $Q3+1.5*IQR$). That said, before we progress, we would like to comment on from where the major outliers were found to reside, as this is surely a relevant part of the overall story. The capital 'N' listed in the final column of table 1 is the total sample size, the lowercase 'n' listed below the table shows how many of observations were actually used for analysis after the outliers were stripped out. They conform in sequence to the listing under 'N'. For example, the net profit margin n of 10, compared to the N of 11 indicates that 1 observation was dropped in real estate, none were dropped from banking ($N=11$ $n=10$), 12 were dropped for financial services ($N=35$ $n=23$), and 1 was dropped for the industrial sector. And so on and so forth for the other sectors. Indeed, financial services, particularly in relation to net profit margin, stands out as being the chief offender in terms of extreme values, 12 in all, from this group. Within in this category, around a third of all values were deemed extreme enough to be outliers. Of the 12 dropped observation, the lowest was minus 2158 and the highest +655, so that in itself gives an early induction of the degree of volatility in the financial sector. The

overall results are depicted in the Tables 1, 2 and 3.

Table 1: Descriptive Statistics

	Net Profit Margin		
	Mean	SD	N
Real Estate	12.95	29.74	11
Banking	29.24	10.87	10
Financial Services	.4	402.74	35
Industrial	9.9	151.36	34
Outlier absence n:	Net Profit	n=10,10,23,33	

Table 2: Descriptive Statistics

	ROA		
	Mean	SD	N
Real Estate	2	3.12	11
Banking	1.04	0.34	10
Financial Services	-0.23	3.8	35
Industrial	2.68	3.62	34
Outlier absence n:	ROA	n=11,10,32,30	

Table 3: Descriptive Statistics

	ROE		
	Mean	SD	N
Real Estate	4.12	5.88	11
Banking	8.66	3.47	10
Financial Services	-1.06	8.67	35
Industrial	4.42	6.73	34

Outlier absence n:	ROE	n=11,10,32,30	
--------------------	-----	---------------	--

In terms of analysis, the most apparent procedure to follow is to run is an ANOVA followed by a Tukey-Kramer or one of the many the ‘likes thereof’, however, the issue at hand is in how unbalanced the data is in respect of both group number and unequal variance. Hence, we need to be pragmatic in our engagement. Supplemented with a 10000 iteration Monte Carlo Simulation, we will still run an overall ANOVA, but more as a supportive measure to individual t-tests. The intention being to only report the ANOVA (or post ANOVA) result(s) if they contradict the pair wise t-tests. None of them did. The choice of which pairs to pair against each other was based on group size, and so a glance at the table above indicates that the obvious pairs to match are Real Estate vs. Banking; and Financial Services vs. Industrial. Thereafter, transitivity will allow us to draw a few comparative conclusions as to the performance of the pairs which were not directly compared. The appendices offer a helpful visual for how they lined up against one another.

In the absence of outliers net profit margin is normally distributed. Real Estate has a significantly higher variance than banking, and banking offers a significantly higher value.

To the tune of 99% confidence, financial services display a significantly higher variance than that of the Industrial sector. However, there is no significant difference between the average net profit margins.

With or without the removal of outliers, the 5-year return on assets is normally distributed. A comparison of variance between Banking and Real Estate reveal them unequal and significantly higher in the latter. The mean 5-year ROA of those two groups are however statistically not different. Maintaining focus on the ROAs, there is no difference between the variances of financial services and industrial sectors. The mean ROAs are however significantly different, and strongly favour of the industrial sector.

The five year Returns on Equity is very close to being normally distributed. However, strictly speaking, the dropping of outliers is required to sure up the walls of the bell. A comparison of variance between Real Estate and Banking offers a just a haze of difference. With a p-value of 0.64, we are splitting hairs in citing the difference as being weakly significant. That said, for the sake of conservatism, the subsequent t-test was conducted under the assumption of unequal variances, and it shows that banking offers a significantly higher ROE. Industrial and Financial Services have no statistical difference in the variance but the mean of ROE is much higher in the Industrial sector.

CONCLUSIONS

Of the analysed sectors, ‘banking’ stands out as by far the most attractive sector in which to invest in Kuwait. Given its relative safety, one would expect it to be less attractive in terms of average returns. That is however not the case. With the exception of the ROA of the industrial and real estate sectors, it far outperforms in all other measures(Taking further into account the fact that it offers the lowest variance, it seems just to conclude that banking stands head and shoulders above the rest of the sectors in this dataset. One may consider it somewhat curious that markets do not seem to have arbitrated away what appears to be a big bill on the sidewalk.

In stark contrast, going by this data, investment in non-banking financial service companies appears to be a kind of fool’s errand. Given that volatility of the sector is (literally) off the charts, one would, to the least, expect a positively skewed distribution and; or a higher average returns in order to compensate for that extra risk. Neither of these materialises in the data.

The industrial sector is the closest rival to financial services in terms of volatility, yet in each of the three measures offers a higher average return. So any investor who is keen to accommodate higher risk in search of higher returns could find a much more attractive trade-off by opting for the industrial sector over financial service – especially if the taking on of that extra risk is specifically tailored to bet on the ROA. In terms of rank order, real estate and industrial are pretty much equally matched. One may however; feels that the presence of a lower variance in respect to net profit permit real estate to pip the post into second place – but some may consider that the unbalanced group numbers make that a bit of a slippery statement.

Overall, the picture at the level of ‘sectorial aggregates’ seems quite clear in the positive light it shines on investment in the banking sector, and in contrast the negative light it casts on non-banking financial services in Kuwait. That said, as this analysis was done of ‘sectorial aggregates’ the generated advice poses more relevance for ‘fund investors’ as opposed to individual stock pickers.

LIMITATION OF THE STUDY

One potential limitation of this study is clearly the period of analysis. Obviously, a five-year period is not long enough, but currently that’s the data available on the performance of the sectors selected for the study. In an ideal world, return and risk should be estimated over a longer period of time which encompasses several cycles of the economy. Another limitation of the study is that only three measures of performance have been used.

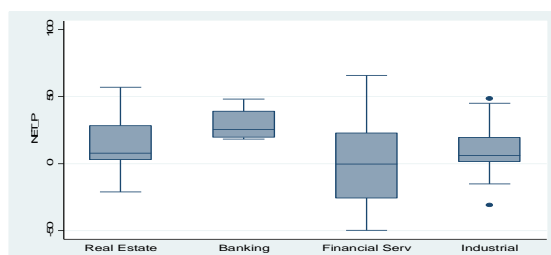
REFERENCES

1. AlAbdulhadi, D., Shetty, S. & Alshamali, M. (2013), "A Fractal Analysis of Kuwait Stock Market". *The International Journal of Finance*, 25 (25).
2. Al-Loughanni, N. (2005). "The Holiday Effect and Stock Return in the Kuwait Stock Exchange". *Journal of Global Competitiveness*, 13(1) 81-91.
3. Al-Saidi, M. (2013). "Ownership Concentration and Firm Performance: The Case of Kuwait". *Jordan Journal of Business Administration*. 9 (4) 803-820.
4. U. Modum, R. O. Ugwoke, E. O. Onyeonu, N. J. Modebe, S. N. Kodjo & L. C. Odoh, *The Effect of Creative Accounting on Audit Failure: The Case of Manufacturing Companies Quoted on the Nigerian Stock Exchange*, *International Journal of Accounting and Financial Management Research (IJAFMR)*, Volume 4, Issue 1, January - February 2014, pp. 9-14
5. Al-Shamali et al. (2012). "The Retail Banking Sector in an Oil-Rich Economy", *Middle East Journal of Business*. 7 (4): 31-37.
6. Ane, T. & Kharoubi, C. (2003), "Dependence Structure and Risk Measure", *Journal of Business*. 76(3): 411-438.
7. Anthony, L. (2008). "Why Risk Is Not Variance: An Expository Note". *Risk Analysis*, 28(4) 925-928.
8. Benjamin et al. (2001). "Return and Risk on Real Estate and Other Investments: More Evidence". *Journal of Real Estate and Portfolio Management*. 7(3): 183-214.
9. Challa Radhakumari & M. R. Geetha Bala, *Financial Services for Bankless Villages A Facet of Financial Inclusion: The Succeeding Tale in Andhra Pradesh and Karnataka*, *International Journal of Economics, Commerce and Research (IJEER)*, Volume 3, Issue 1, January - March 2013, pp. 63-78
10. Chadha, P. (2016). "Exploring the Financial Performance of the Listed Companies in Kuwait Stock Exchange Using Altman's Z-Score Model". *International Journal of Economic and Management Sciences*. 5(3): 1000341.

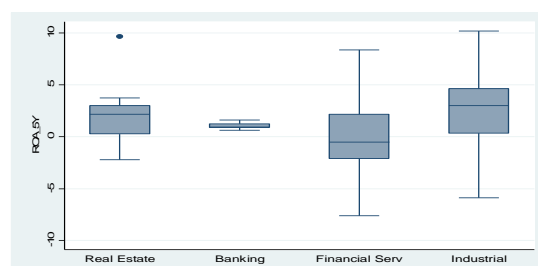
11. Fadil, F. (1989) "Money, income and sterilization: tests for causality in the oil economy of Kuwait". 21: 1305-1324.
12. Graeme, N. & Webb, J. (2001), "Assessing Risk for International Real Estate Investments", *The Journal of Real Estate Research*. 11(2): 103-115.
13. Haji, J. (1987) "Key Sectors and the structure of production in Kuwait-an input-output approach", *Applied Economics*. 19: 1187-1200.
14. Kuwait Stock Exchange website: <http://www.boursakuwait.com/default.aspx>
15. MacGregor et al. (1999). "Perception of Financial Risk: A Survey Study of Advisors and Planners", *Journal of Financial Planning*. P68-86. September 1999.
16. Meed Business Review. "Kuwait's Bourse is Losing the Competitive Edge" May 2016, p. 48.
17. Nyor, T. & Yunusa, A. (2016) "Capital Structure and Operating Performance of Listed Conglomerate Firms in Nigeria", *International Journal of Finance and Accounting*. 2(2): 126-133.
18. Qiu et al. (2015). "Implied discount rate and payback threshold of energy efficiency investment in the industrial sector", *Applied Economics*. 47(21): 2218-2233.
19. Redmond, C. & Cabbage, F. (1988) "Portfolio Risk and Return from Timber Asset Investments", *Land Economics*, 6(4): 325-347.
20. Shapiro, A. (1982). "Risk in International Banking", *Journal of Financial and Quantitative Analysis*. 17(5): 739.

APPENDICES

Appendix I: Net Profit by Sector



Appendix II: 5 Year Return on Assets by Sector



Appendix III: 5 Year Return on Equality by Sector

